

CLAIMS

WHAT IS CLAIMED IS:

1. An anti-allergic complex molecule having at least a first segment competent for importation of said molecule into mast cells, and a second segment for having an anti-allergic effect within said mast cells, said first segment being joined to said second segment through a linker.
 2. The complex molecule of claim 1, wherein said second segment has said anti-allergic effect by at least significantly reducing degranulation of said mast cells.
 3. The complex molecule of claim 2, wherein said second segment is selected from the group consisting of a peptide, a peptidomimetic, and a polypeptide.
 4. The complex molecule of claim 3, wherein said second segment is a peptide.
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5. The complex molecule of claim 4, wherein said first segment is a peptide.
 6. The complex molecule of claim 5, wherein said linker is a covalent bond.
 7. The complex molecule of claim 6, wherein said covalent bond is a peptide bond.
 8. The complex molecule of claim 7, wherein said second segment is a peptide taken from the C terminal sequence of $G\alpha i_3$.

9. The complex molecule of claim 8, wherein said peptide has an amino acid sequence AAVALLPAVLLALLAPKNNLKECGLY, and cyclic derivatives thereof.

10. The complex molecule of claim 7, wherein said second segment is a peptide taken from the C terminal sequence of G α t.

11. The complex molecule of claim 10, wherein said molecule is a peptide having an amino acid sequence AAVALLPAVLLALLAPKENLKDCGLF, and cyclic derivatives thereof.

12. A composition for treating an allergic condition in a subject, comprising as an active ingredient a pharmaceutically effective amount of a molecule having at least a first segment competent for importation of said molecule into mast cells, and a second segment for having an anti-allergic effect within said mast cells, said first segment being joined to said second segment through a linker.

13. The composition of claim 12, wherein the allergic condition is selected from the group consisting of nasal allergy, an allergic reaction in an eye of the subject, an allergic reactions in the skin of the subject, acute urticaria, psoriasis, psychogenic or allergic asthma, interstitial cystitis, bowel diseases, migraines, and multiple sclerosis.

14. The composition of claim 12, further comprising a pharmaceutically acceptable diluent or carrier.

15. The composition of claim 14, in a dosage form suitable for topical administration to the eye, the skin or to a mucous membrane of a subject.
16. The composition of claim 14, in a dosage form suitable for administration by inhalation or intranasally
17. The composition of claim 14, in a dosage form suitable for oral or parenteral systemic administration.
18. The composition of claim 13, wherein said second segment has said anti-allergic effect by at least significantly reducing degranulation of said mast cells.
19. The composition of claim 18, wherein said second segment is selected from the group consisting of a peptide, a peptidomimetic, a polypeptide, and a protein.
20. The composition of claim 19, wherein said second segment is a peptide.
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21. The composition of claim 20, wherein said first segment is a peptide.
22. The composition of claim 21, wherein said linker is a covalent bond.
23. The composition of claim 22, wherein said covalent bond is a peptide bond.
24. The composition of claim 23, wherein said second segment is a peptide

taken from the C terminal sequence of Gai₃.

25. The composition of claim 24, wherein said molecule comprises a peptide having an amino acid sequence AAVALLPAVLLALLAPKNNLKECGLY, and cyclic derivatives thereof.

26. The composition of claim 23, wherein said second segment is a peptide taken from the C terminal sequence of Gαt.

27. The composition of claim 26, wherein said molecule comprises a peptide having an amino acid sequence AAVALLPAVLLALLAPKENLKDCGLF, and cyclic derivatives thereof.

28. The composition of claim 27, wherein said therapeutic agent further comprises a second molecule, said second molecule being a peptide having an amino acid sequence AAVALLPAVLLALLAPKNNLKECGLY.

29. The composition of claim 20, wherein said molecule is a derivatized peptide having an amino acid sequence Succinyl-AAVALLPAVLLALLAPKNNLKECGLY.

30. A method for treating an allergic condition in a subject, comprising the step of administering a pharmaceutically effective amount of a therapeutic agent to the subject, said therapeutic agent comprising a molecule having at least a first segment competent for importation of said molecule into mast cells, and a second segment for

having an anti-allergic effect within said mast cells, said first segment being joined to said second segment through a linker.

31. The method of claim 30, wherein the allergic condition is selected from the group consisting of nasal allergy, an allergic reaction in an eye of the subject, an allergic reactions in the skin of the subject, acute urticaria, psoriasis, psychogenic or allergic asthma, interstitial cystitis, bowel diseases, migraines, and multiple sclerosis.

32. The method of claim 31, wherein the step of administering said therapeutic agent is performed by topical administration.

33. The method of claim 32, wherein said topical administration is to the eye, the skin or to a mucous membrane of the subject.

34. The method of claim 33, wherein the step of administering said therapeutic agent is performed by inhalation or by intranasal administration.

35. The method of claim 34, wherein the step of administering said therapeutic agent is performed by oral or systemic parenteral administration.

36. The method of claim 32, wherein said second segment has said anti-allergic effect by at least significantly reducing degranulation of said mast cells.

37. The method of claim 36, wherein said second segment is selected from the group consisting of a peptide, a polypeptide, and a protein.

38. The method of claim 37, wherein said second segment is a peptide.
39. The method of claim 38, wherein said first segment is a peptide.
40. The method of claim 39, wherein said linker is a covalent bond.
41. The method of claim 40, wherein said covalent bond is a peptide bond.
42. The method of claim 41, wherein said second segment is a peptide taken from the C terminal sequence of Gα_{i3}.
43. The method of claim 42, wherein said molecule is a peptide having an amino acid sequence AAVALLPAVLLALLAPKNNLKECGLY, and cyclic derivatives thereof.
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44. The method of claim 41, wherein said second segment is a peptide taken from the C terminal sequence of Gα_t.
45. The method of claim 44, wherein said molecule is a peptide having an amino acid sequence AAVALLPAVLLALLAPKENLKDCGLF, and cyclic derivatives thereof.
46. The method of claim 40, wherein said therapeutic agent further comprises a second molecule, said second molecule being a peptide having an amino acid sequence

AAVALLPAVLLALLAPKNNLKECGLY.

47. The method of claim 31, wherein said molecule is a peptide having an amino acid sequence Succinyl-AAVALLPAVLLALLAPKNNLKECGLY.

48. A method for promoting importation of a molecule into a cell of a subject *in vivo*, the method comprising the steps of:

- (a) attaching a leader sequence to the molecule, said leader sequence being a peptide having an amino acid sequence AAVALLPAVLLALLAP, to form a complex;
 - (b) administering said complex to the subject; and
 - (c) importing said complex into the cell through said leader sequence, such that the molecule is imported into the cell.
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